
Health information-seeking behavior and older African American women

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This study explored the ways in which urban, older, African American women obtain health information and some of the factors that influence such activity. Among the possible determinants examined were self-perceived literacy, access to health information, and mobility. The findings suggest that respondents receive health information from their physicians, the mass media, and members of their social networks. The results of this research also indicated that members of this population have a highly positive perception of the public library, although only a small segment use the library regularly, and that it may be in the interest of the library to investigate the role it could play in providing health information to older adults.

INTRODUCTION

America's older population is expanding rapidly. It is expected that within the next twenty to thirty years—as the “baby boomers” reach retirement age—the number of persons aged sixty-five and older will reach proportions that the United States has never seen before [1]. An increase in longevity, influenced by improvements in health care, technology, nutrition, and lifestyle, has given rise to predictions that the entire population of persons over the age of sixty-five will continue to grow, and that by the year 2020 that figure will reach a total of fifty-two million. The population of persons eighty-five years old and older is the fastest growing of all segments. Demographic projections indicate that there will be more than 100,000 centenarians living in the United States by the year 2000. Estimates indicate that by the year 2020 an unheard of 16.5% of the U.S. population will be sixty-five years of age or older. African Americans are expected to number 5.6 million (10.8 %) of the over-sixty-five citizenry by the year 2020, with older African American women numbering 3.2 million. These women will constitute more than 6% of the total older adult population and 57.5 % of the black older Americans [2]. Not surprisingly, it is also predicted that the impact on the economic, social, and political systems will be enormous. The health care services system, in particular, will be greatly affected, with the largest number of patients and potential patients over the age of sixty-five in its history.

On average, older adults encounter more health-related problems than members of the general population. Older persons of African descent are no exception. In fact, the research literature reveals that blacks in general and older African Americans in particular sustain higher incidences of certain diseases and illnesses (e.g., asthma, stroke) than do members of the larger population. However, many factors contribute to the aging process, and it would therefore be somewhat unrealistic to expect older people to function as a homogeneous population. Even the most modest predictions for longevity are not applicable across gender, racial, ethnic, and socioeconomic lines. According to the Committee on a National Research Agenda on Aging, “aging is dependent on gender and ethnic, economic, political, and educational circumstances. Lifestyle, risks of illness and dependency, and functional ability also affect how one ages” [3].

The literature reveals that black women, for various reasons, often encounter a higher rate of potentially fatal physical disabilities as they age [4–6]. Of all segments of the older American population, black women in particular appear to experience excessive rates of morbidity and mortality as a result of diseases such as cancer and diabetes [7, 8]. The rate of hypertension within the African American community is measurably higher than in the general population and averages 40% among adult black women. Left unmonitored or uncontrolled, hypertension has been linked to the onset of more serious diseases such as stroke and coronary heart disease [9].

A major component of preventive health practice is the availability and provision of information regarding risks to health and promotional measures for enhancing the health status among this population. According to Krikelas, the search for information develops when there is a perceived need for information that cannot be satisfied by the current knowledge base [10]. The focus of this research, the basis of the author's doctoral dissertation, was the investigation of the information-seeking behavior of older black women. Particular attention was paid to the acquisition of health information. The study addressed the following research questions:

1. From what sources do older African American women in urban areas seek health information?
2. What are the factors that influence health information-seeking behavior?
3. What role does the mass media play in the provision of health information?
4. Does the public library in an urban area have a role in the health information-seeking behavior of older black women?

This study adds to the growing body of knowledge that attempts to understand the effects of cultural differences on the various ways in which different groups seek and acquire information, in this case, health information. The study is important because it investigates an area that has received little, if any, research attention. The extent to which older African American women receive health information and the sources, both formal and informal, from which such information is acquired, have not been reported in the literature.

METHODOLOGY

The research population for this study consisted of forty-five African American women over the age of sixty-five residing in Pittsburgh, Pennsylvania. The sample was drawn from three different communities: (1) a residential facility that is, almost exclusively, home to older persons and individuals with disabilities; (2) a community-based medical center; and (3) a community recreation center serving older adults. These sites were selected to represent a range of the population of older black women living in Pittsburgh. Following are brief descriptions of each site listed in the order in which the research was conducted:

1. Bellefield Dwellings (BD) is an apartment building located in the Oakland section of Pittsburgh, a racially and ethnically diverse area that is both residential and commercial. BD is a large, well-maintained building designated for older persons and people with disabilities. A majority of the residents are older African Americans, and a significant proportion are female. Fifteen subjects participated.
2. Alma Illery Medical Center (AIMC) is located in the

Homewood section of Pittsburgh, a primarily African American neighborhood. AIMC is a community-based, ambulatory care health facility. The number of black women over the age of sixty-five regularly served by the center is estimated at 375, approximately 10% of AIMC's patient and client base. Sixteen subjects participated.

3. New Opportunities for the Aging (NOFA) is a community center located in the Hill District, a mainly residential area in Pittsburgh that is populated predominantly by African Americans. NOFA is a social and recreation center for older residents of the immediate and surrounding areas. While men do attend the center, the greatest proportion of NOFA's membership is clearly composed of older black women. Fourteen subjects participated.

The subsample size of each site varied only slightly (site 1 = fifteen; site 2 = sixteen; site 3 = fourteen). Due to the similarities in the demographics at all three locations, the sites were analyzed as a single sample. The program coordinators at each location served as intermediaries in explaining the study and recruiting subjects. A consent form describing the purpose of the study, assurances of confidentiality, and ability to withdraw at any time was given to all participants.

Data collection

The investigation employed a fifty-item interview survey schedule. Interviews were conducted with each subject between October 1992 and March 1993. The majority of these were face-to-face interviews conducted by the author either in the homes of subjects or at the respective centers. Five interviews (11.1 %) were conducted by telephone rather than in person. In cases where an in-person interview could not be arranged, telephone interviews were considered to be a valid alternative.

The interview instrument was designed to reflect the interdisciplinary nature of the research, as well as the social, cultural, and life stage considerations of the group under investigation. The questions on the survey instrument consisted of closed, semi-closed (requiring a brief response), and Likert-style scaled questions. Five questions were open-ended, inviting participants to express, in detail, their particular circumstances, insights, and opinions.

RESULTS

The data were subjected to descriptive analysis to compute measures of central tendency, and to inferential statistical analysis employing the *t* test for independence and equality of means. In addition, Pearson's product-moment correlation was used in cross-tabulations of comparable questions to determine the relationship among certain variables. Frequencies and

percentages on all questionnaire items were reported, including means and standard deviations where appropriate. Bivariate measures of relationship were calculated when appropriate. In addition to the statistical significance of the relationships, the strength of the relationships was addressed.

Age and education

The respondents ranged in age from sixty-three to eighty-eight years old. The mean age of the sample was 73.7 years. The means at each of the three sites were similar. At site 1 (BD) the mean age was 73.1 years, followed by 74 years for site 2 (AIMC), and 74.2 years for site 3 (NOFA).

The mean level of education attained was 11.02 years. The education attainment for participants in this study spanned from the sixth grade of primary education (reported by one participant) to graduate degree level education (reported by one participant). Sixteen or 35.6%, the largest single percentage of those interviewed, completed high school. The average education levels of participants at sites 1, 2, and 3 were 10.4 years, 10.8 years, and 11.7 years, respectively.

Reading habits and self-perceived literacy

Information on the subjects' reading habits and perceived literacy was gathered with a series of four questions. On a scale of 1 to 5 (1 = "no time at all" and 5 = "about three hours or more") respondents were requested to indicate the amount of time per day they spent reading. Eighty percent indicated that they read daily, with 26.7% saying they read "about three hours or more," 17.8% indicating that they read "about two hours," 17.8% indicating "about one hour," and 17.8% "about half an hour." For reasons primarily related to problems with vision, 20% said they "almost never read."

In an effort to gain insight into the level of self-perceived literacy in this group and whether perceptions about literacy affected the kinds of things that they read and the amount of time they spent reading, three related questions were posed. On a scale of 1 (excellent) to 5 (poor), each participant was asked where she would place herself as a reader, how well she understands what she reads and how fast she thinks she reads compared to other people in the same age category. A clear majority, 70% of those responding, considered themselves to be "average" readers. Fifty-seven and a half percent thought that they possessed "average" reading comprehension skills, and 52.5% thought that the rate at which they read was "average."

The participants were asked a follow-up question, "What kinds of things do you read at that time?" Respondents were free to name any and all reading material that they used. The items mentioned by all who

responded were newspapers, magazines, books, and pamphlets. For those who answered this question, the most popular reading materials were newspapers (78%), followed by magazines (68.3%).

DATA ANALYSIS PERTAINING TO RESEARCH QUESTIONS

The study sought to address the following research questions:

1. From what sources do older African American women in urban areas seek health information?

The results indicated that respondents were interested in health information and that they used a wide variety of sources of such information. Participants generally indicated that they sought and received health information from their personal physician, print and nonprint media, family members, and close friends.

As far as participants interviewed for this research were concerned, their medical doctor was the preferred source of health information. Of the twenty-eight (63.6%) participants who said that people were their preferred source, twenty-three (51%) indicated that the person to whom they were referring was their personal physician. Physicians were also considered the most believable source, as indicated by 74.4% of the subjects. Only a small proportion, 21.2%, felt otherwise. In addition, a majority (95.2%) reported that they were comfortable when asking their doctors about health matters.

Television and magazines are a common delivery mechanism for information about health, as shown by the 86.7% and 65.9% of those who responded affirmatively to using these media as sources of health information. The percent using magazines was lower because of the cost or because of the participant's problems with vision (e.g., cataracts or glaucoma). However, all participants had access to television. Radio was used by only 33.3%. It is interesting that for a segment of the population that became acquainted with radio many years before the advent of television, the radio was not a popular medium.

As mentioned earlier, older African American women are no more homogeneous than any other group. Thus the individuals in this study used various sources of health information, with some sources used more by some respondents than by others. It appears that urban, older African American women are interested in information regarding health issues, and that they utilize various sources of health information at different times, depending on the specific health information need.

2. What are the primary factors that influence health information-seeking behavior?

The research examined certain socioeconomic issues as they may pertain to the participants' health infor-

Table 1
Literacy rating

Health information	Use			Non-use			t-value source
	n =	M	SD	n =	M	SD	
Magazines	26	3.63	0.85	14	2.91	0.41	2.94***
Books	14	3.77	0.82	25	3.15	0.73	2.42**
Newspapers	22	3.58	0.65	18	3.13	0.91	1.84*

* $P < .10$
 ** $P < .05$
 *** $P < .01$

mation-seeking behavior. For example, education was thought to be an important factor. Those with more education (an average of 12.9 years) tended to use the library more, a factor that could facilitate the acquisition of health information. Furthermore, age seemed to emerge as a factor that may influence health information-seeking behavior for members of this group. The younger respondents, those with a mean age of seventy years (24.4%), visited the library more than older members of the sample.

Literacy was found to be significantly related to the use of print materials as a source of health information. Table 1 presents mean literacy ratings. In addition, when self-reported literacy scores were combined with the amount of time spent reading, a literacy rating was computed on a 1 to 5 scale (1 = lowest rating and 5 = highest rating). The mean literacy rating was 3.375 for all those responding, an above-average literacy score (with 3.0 being average), which would have a positive influence on health information-seeking activities.

The degree of access to health information from various sources was a contributing factor as well. As the results indicated, none of the respondents encountered difficulty in traveling locally, including to and from physician appointments. Most rated above average on the Activities of Daily Living (ADL) scale, which measures routine functions performed during the course of a normal day (dressing, shopping, cooking, etc.). Forty respondents (95.2%) indicated that when they have questions about health matters they feel comfortable talking with their doctors about such matters.

Understandably, an individual's concern about a certain health matter will influence whether and to what extent the person seeks health information. It should be noted that any number of undetermined factors may influence that behavior (e.g., severity of the problem, level of concern, etc.), as expressed in the Health Belief Model [11].

3. What role, if any, do the mass media play in the provision of health information?

All forms of media were used, to some extent, by most of the group under investigation. Television as a source of health information was described as "above

average" by 13.6% of the sample and "average" by some 54.5%. Television's usefulness as a source of health information was rated "poor" by only 11.1% of those responding. On the other hand, 33.3% of the participants used the radio and 64.9% of those responding found the usefulness of radio to be "poor."

Of all print media (newspapers, magazines, books, and pamphlets) popular magazines, with a combined score of "average" (23.7 %) and "above average" (28.9%) of 52.6%, were mentioned most often as useful sources of health information. This finding may reflect the recent trend of including articles dedicated to issues of health in many popular magazines. Seventeen different titles were cited, many repeatedly. Those titles mentioned two or more times and the number of times they were cited by those interviewed were:

<i>Modern Maturity</i> (10)	<i>Good Housekeeping</i> (3)
<i>Readers' Digest</i> (6)	<i>Prevention</i> (3)
<i>Ladies Home Journal</i> (5)	<i>Family Circle</i> (2)
<i>Ebony</i> (4)	<i>Redbook</i> (2)
<i>Better Homes and Gardens</i> (3)	<i>Time</i> (2)
	<i>Woman's Day</i> (2)

4. Does the library in urban areas have a role in the health information-seeking behavior of older African American women?

Nearly all participants in the present study expressed positive opinions about the public library. They saw it as a valued institution that could be of help to them if they were to visit. Thirty-eight percent thought it "likely" that a public library would have health information that could help them, and an impressive 60% thought the same to be "very likely," a point which supports earlier research [12]. However, only 11.1% reported visiting the library "more than once a month," while 13.3% said that they visited the library "more than once a year." Unfortunately, 75.6 said they "hardly ever" used the public library. A review of the literature revealed that some public library systems have provided services designed for older persons as well as projects aimed at the dissemination of health information [13, 14]. This suggests that despite the lower use of the library by participants in this study, public libraries can play a role in providing health information to older African American women.

The variables of age, education, and ADL scores were analyzed as factors that may have influenced use of the public library among this sample. The findings are supported by results of earlier studies by both Heisel and Kamin, which indicate that the level of education attained influences the degree of reading activity and library use [15, 16]. Of all three variables, the level of education attained was the most significant ($P < .01$). (See Table 2).

Table 2
Age, education, and ADL scores for library users and non-users

	Users (n = 11)		Non-users (n = 34)		t-value
	M	SD	M	SD	
Age	70.3	4.1	74.8	6.2	-2.23**
Education	12.9	1.6	10.4	2.0	3.74***
ADLs	2.9	0.06	2.8	0.2	1.90*

* $P < .10$

** $P < .05$

*** $P < .01$

DISCUSSION

Several socioeconomic factors were examined as possibly contributing to the health information-seeking behavior of the older African American women in this research. Age, education, self-reported literacy, and accessibility were found to have a positive influence on the use of the library and reading print materials. Although in the minority, those respondents within the younger age mean (70 years of age) and those with higher education attainment (12.9 years of education) tended to use the library more as well as engage in magazine reading. A sizable majority (84.4%) said that there was no health information that they needed or wanted that they did not get from the different sources available to them. In addition, nearly all of the respondents had some means of transportation at their disposal. Thus, it appears that lack of access to health information was not a factor for members of this group.

The availability of health information is important to older African American women and they seek it out in various ways from a combination of sources. Because physicians are viewed by this group as the most preferred and believable source of health information, they should provide more information on illness prevention and health promotion, in addition to treatment of symptoms and disease. This should be part of a more comprehensive approach to health care for the rapidly expanding segment of the older population.

Television, as an information medium, has evolved beyond its capacity simply to entertain. The relative affordability of television sets and videocassette recorders allows television to play an even greater role in the provision of health information. Programming aimed at older persons is already growing. As this group increases in size as well as economic and political power, it should come as no surprise to find demands for more programs dedicated to health promotion and disease prevention specifically for older people. Similar conclusions can be stated in regard to popular magazines as a source of health information. In fact, such an observation can be readily made by casually glancing at the cover or table of contents of

several popular magazines which regularly feature articles that provide health information of one form or another.

Because so little research has been dedicated to the health information needs of the population investigated in this study, more extensive research on larger samples should be undertaken. In addition, similar research should be conducted with older adult cohorts of other racial and cultural backgrounds.

It is important that collaborative efforts to assist in the delivery of consumer health information to older Americans begin in earnest now and be conducted by various types of libraries and other community organizations. This may include an examination of whether religious organizations, social services, and civic agencies, including the public library, can serve as viable channels for health information delivery.

Some states, including California, Florida, and Pennsylvania, where this research was conducted, are home to comparatively high proportions of the older adult population [17]. State agencies responsible for addressing the needs of persons over the age of sixty-five should make a concerted effort to undertake or otherwise support further research efforts relative to consumer health issues. There is no question that libraries in both the United States and Canada have attempted to provide some level of health information to the public [18, 19]. For example, the Planetree Health Resource Center in California is an excellent model for the kind of consumer health information services that health sciences libraries might also provide to older adults [20]. Still, the predicted population increase of older persons and the estimated rise in the need for health care are destined to become major national concerns. The deliberate and systematic dissemination of information that strongly encourages health promotion and disease prevention in this population would assist this nation's older adults, including older African American women, in playing a larger part in the maintenance of their own physical well-being.

The public library was held in high esteem by all respondents in this research, and it is possible to conclude that it has the potential to serve as a viable avenue to health information for urban, older black women. At the same time, most members of this group were not regular library users. The lower rate of library use by this segment of the population should be further explored and efforts increased to reacquaint them with the library. Because it appears that age and level of education influence use of the library, the public library must employ alternative means of outreach and programming. They must incorporate spirited marketing campaigns aimed at this group in order to attract users and nonusers alike to the library and to serve the entire population of older adults.

REFERENCES

1. U.S. DEPARTMENT OF COMMERCE, BUREAU OF THE CENSUS. Historical statistics of the United States: colonial times to 1970, part 1. Washington, DC: U.S. Government Printing Office, 1975:8.
2. U.S. DEPARTMENT OF COMMERCE, BUREAU OF THE CENSUS. Economic and Statistics Administration. Current population reports: population estimates by age, sex, race, and hispanic origin: 1980-1991. Washington, DC: U.S. Government Printing Office, 1993, series p-25-1095:xvi.
3. LONERGAN ET. Behavioral and social sciences. In: Loneragan, ET, ed. Extending life, enhancing life: a national research agenda on aging; Committee on a National Research Agenda on Aging. Washington, DC: Division of Health Promotion and Disease Prevention, Institute of Medicine, National Academy Press, 1991:71-87.
4. MANUEL RC. The physical, psychological, and social health of black older Americans. In: Livingston IL, ed. Handbook of black American health: the mosaic of conditions, issues, policies, and prospects. Westport, CT: Greenwood Press, 1994:300-14.
5. GIBBS T. Health-seeking behavior of elderly blacks. In: Jackson JS, ed. The black American elderly: research on physical and psychosocial health. New York: Springer Publishing, 1988:282-91.
6. JACKSON JJ. Social determinants of the health of aging black populations in the United States. In: Jackson JS, ed. The black American elderly: research on physical and psychosocial health. New York: Springer Publishing, 1988:69-98.
7. TULL ES, MAKAME MH, ROSEMAN JM. Diabetes mellitus in the African-American population. In: Livingston IL, ed. Handbook of black American health: the mosaic of conditions, issues, policies, and prospects. Westport, CT: Greenwood Press, 1994:94-109.
8. U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, TASK FORCE ON BLACK AND MINORITY HEALTH. MARGARET HECKLER, SECRETARY. Report of the secretary's task force on black and minority health. (Executive summary, vol 1). Washington, DC: U.S. Government Printing Office, 1985:63-75.
9. SHERROD P. Controlling hypertension. In: White EC, ed. The black women's health book: speaking for ourselves. Seattle: Seal Press, 1990:151-5.
10. KRIKELAS J. Information-seeking behavior: patterns and concepts. Drexel Libr Q 1983 Spring;19(2):5-20.
11. BECKER MH, ED. The Health Belief Model and personal health behavior. Thorofare, NJ: Charles B. Slack, 1974.
12. ANDERSON L, LUSTER L, WOOLRIDGE P. Reading needs of older adults: a survey. Wilson Libr Bull 1992 Nov;67(3):41-4, 98.
13. DEFOE D. InfoHealth: community health service at Kingston Public Library. Can Libr J 1991 Oct;48(5):340-3.
14. TUROCK BJ. Serving older adults. In: Heim KM, Wallace DP, eds. Adult services: an enduring focus for public libraries. Chicago: American Library Association, 1990:349-71.
15. KAMIN J. How older adults use books and the public library: a review of the literature. Occasional papers. Champaign, IL: University of Illinois, Graduate School of Library and Information Science, 1984.
16. HEISEL MA. Learning and information seeking activities of urban, aged, black adults [Dissertation]. New Brunswick, NJ: Rutgers University, State University of New Jersey, 1983: 104.
17. U.S. DEPARTMENT OF COMMERCE, BUREAU OF THE CENSUS. ECONOMIC AND STATISTICS ADMINISTRATION. Sixty-five plus in the United States. [Web document] Washington, DC: National Institute on Aging, 1995 May. [cited August 1996] Available from Internet: <http://www.census.gov/socdemo/www/agebrief.html>.
18. COSGROVE TL. Planetree health information services: public access to the health information people want. Bull Med Libr Assoc 1994 Jan;82(1):57-63.
19. MARSHALL JG, SEWARDS C, DILWORTH EL. Health information services in Ontario public libraries. Canadian Libr J 1991 Feb;48(1):37-43.
20. COSGROVE, op. cit.

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